H. Chase Stevens

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EXPERIENCE

Principal Data Science Engineer at **Teikametrics, Inc.** July 2019 - Present
Senior Data Science Engineer at **Teikametrics, Inc.** December 2017 - July 2019

- Served as tech lead for 12-person Data Science group; liaised directly with clients
- Architected core machine learning training and serving platform atop AWS SageMaker, allowing rapid prototyping with CI/CD (see "Conferences")
- Genericized and adapted existing Scala-based automated bidding technology to new advertising products, directly enabling over $1m/yr in additional revenue

Software Engineer at **Curata, Inc.** April 2017 - November 2017

- As part of Research and Development division, leveraged NLP, ML, and optimization techniques in ideating, prototyping, developing, and productionizing new analytics features using Jupyter Notebooks, nltk, spaCy, and d3.js.
- Redeveloped and improved performance of critical Python ETL systems, in one instance bringing user-facing requests from 3 minutes to under 5 seconds.

Software Engineer at **Skyscanner, Ltd.** May 2013 - February 2017

- Performed business-critical operations for Sequoia-Capital-backed startup up to and during $1.7bn exit; produced codebase audit requisite to acquisition
- Maintained and developed highly-available, service-vital web scraping and deep-linking platform and associated Python framework, parsing over 10 GB/s of data to serve more than 5000 requests/second
- Delivered NLP/ML-based tool for automatic point-and-click web scraper generation
- Proposed and authored Selenium WebDriver-based web scraper framework in Python
- Created AST-based tooling allowing real-time analysis, manipulation, generation, and automated quality assurance of code in multi-million line legacy Python codebase

EDUCATION

University of Edinburgh: *MSc. Artificial Intelligence* 2015 - 2016
Specialism in Natural Language Processing
Dissertation: *Applying Statistical Language Modeling to Genetic Programming*

University of Edinburgh: *MA Hons. Cognitive Science* 2011 - 2015
First-class honours
Dissertation: *Understanding Referential Coordination as a Particle Swarm Optimization Task*

SKILLS

- Code: Python, Scala, SQL, Haskell, Matlab
- Data: XPath, PostgreSQL, Snowflake, Airflow, DBT, Protobuf, Hadoop
- Build/Deployment: Docker, AWS, Heroku, CircleCI, RPM

CONFERENCES

2020. "Painless Machine Learning in Production." EuroPython 2020. Online.

2018. "Exploring the Python AST Ecosystem." EuroPython 2018. Edinburgh, UK.

2015. Stevens, H. C. & Rohde, H. "Modeling Referential Coordination as a Particle Swarm Optimization Task." The 19th Workshop on the Semantics and Pragmatics of Dialogue. Gothenburg, Sweden.

OPEN-SOURCE PROJECTS

- bellybutton: linting engine for Python allowing custom rulesets
- astpath: command-line utility/library for searching Python codebases via AST queries
- monkeys: strongly-typed genetic programming framework
- showast: Jupyter plugin for AST visualization; used in CS curriculum at Bryn Mawr
- hypothesis-protobuf: property-based testing utility for Protocol Buffer messages